



3A LECTURE SCHEDULE Spring 2009



WEEK	DATE	LECTURE TOPIC	READINGS
1	JAN 13	Introduction/Exploring Life	Ch. 1
	15	Exploring Life Continued	Ch. 1
2	20	Chemistry of Life	Ch. 2
	22	Water & Fitness of the Environment	Ch. 2-3
3	27	Carbon & the Molecular Diversity of Life	Ch. 4
	29	Structure & Function of Biological Molecules	Ch. 5
4	FEB 3	Structure & Function of Molecules	Ch. 5
	5	A Tour of the Cell	Ch. 6
5	10	Membrane Structure	Ch. 7
	12	Membrane Structure Continued & Review	
6	17	Introduction to Metabolism	Ch. 8
	19	**LECTURE EXAM I**	Ch. 1-7
7	24	Cellular Respiration: Harvesting Energy	Ch. 9
	26	Cellular Respiration: Harvesting Energy	Ch. 9
8	MAR 3	Photosynthesis	Ch. 10
	5	Photosynthesis & Cell Resp comparison	
9	10	The Cell Cycle	Ch. 12
	12	Meiosis & Sexual Life cycles	Ch. 13
	16 – 21	Spring Break	
10	24	Mendelian Genetics	Ch. 14
	26	**LECTURE EXAM II**	Ch.8-10,12&13
11	31	The Chromosomal Basis of Inheritance	Ch. 15
	APR 2	The Molecular Basis of Inheritance	Ch. 16
12	7	From Gene to Protein	Ch. 17
	9	Regulation of Gene Expression	Ch. 18
13	14	DNA Technology & Genomics	Ch. 20
	16	Descent with Modification	Ch. 22
14	21	Population Genetics	Ch. 23
	23	The Origins of Species	Ch. 24
15	28	Phylogeny & Systematics	Ch. 25
	30	**LECTURE EXAM III**	
16	MAY 5	Introduction to Ecology & the Biosphere	Ch. 52
	7	Population & Community Ecology	Ch. 53 & 54
17	12	Ecosystems & Conservation Biology	Ch. 55 & 56
	14	PRESENTATIONS (8:00 AM – 3:00 PM)	
18	19	**FINAL EXAM 12:45 – 2:45 PM**	



3A LABORATORY SCHEDULE Spring 2009



Assignment Due Dates: Please see the lecture schedule webpage
Lab worksheets are due 1 week after the lab has been completed.

WEEK	DATE	LAB TOPIC	
1	JAN 13	Introduction/Sci Method/ Data Collection/Stats	
	15	Cont. stats, Data collection/Write-ups/	Bring lap top
2	20	Statistical analysis, graphing continued	Bring lap top
	22	Volumetrics - Part 1	
3	27	Volumetrics - Part 2	
	29	Biologically Important Molecules – Part 1	Methods & Results Due
4	FEB 3	Biologically Important Molecules – Part 2	
	5	Acids, Bases & Buffers	
5	10	Scopes and Cells	
	12	Physical Transport - Part 1	
6	17	Physical Transport - Part 2	
	19	Project Proposal Discussion	
7	24	Enzymes	Annotated Biblio Due
	26	Cellular Respiration & Fermentation	Initial Project Proposal
8	MAR 3	Animal Metabolism	
	5	Photosynthesis – Part 1	
9	10	Photosynthesis – Part 2	Final Project Proposal
	12	Mitosis	
	16 – 21	SPRING BREAK	
10	24	Movie: Double Helix	
	26	DNA Isolation	Project Status Reports
11	31	Genetics – Part 1	
	APR 2	Genetics – Part 2	
12	7	PCR – Part 1	
	9	PCR – Part 2	Project Status Reports
13	14	PCR – Part 3 Movie: Evolutionary Arms Race	
	16	Natural Selection & Population Genetics	
14	21	Phyolgeny & Systematics (Cladistics)	
	23	Protein fingerprinting	
15	28	Point Quarter Transects	Field trip
	30	Point Quarter Transects – Data Analysis Project Stuff	Bring laptop
16	MAY 5	Poster project techniques	Final Paper Due
	7	Population Lab – Data analysis	Poster Printed
17	12	Poster project techniques	
	14	PRESENTATIONS (8:00 AM – 3:00 PM)	
18	19	Finals (12:45 – 2:45 PM)	

Laboratory schedule may be subject to change.